

REMARKS

Applicants wish to thank the Examiner for the courtesy of granting a personal interview with the Applicants representative on May 1, 2003.

Reconsideration and allowance of the above referenced application is respectfully requested.

Claims 23-32 are currently pending in the present application. Claims 24, 25, 27, 30, and 32 have been withdrawn from consideration. Claims 23, 26, 28, 29, and 31 are amended above in accordance with the discussions conducted during the above reference Examiner's Interview. The amendments to the claims are fully supported by the specification and claims as originally filed. Particular support is found in the specification at page 3, line 20 through page 4, line 25.

By the above amendments to the claims, Applicants have further defined the invention defined by Claims 23, 26, 28, 29, and 31 to include contacting a sponge with sea water, the sponge having a symbiotic relationship with a bacteria that is capable of concentrating a metal or mineral. Having amended the claims as discussed with the Examiner, the Applicants hereby incorporate all earlier remarks submitted as well as the Declaration under 37 C.F.R. §1.132 of Dr. Winkler in support of patentability of the invention as now claimed.

CONCLUSION


In light of the above, Applicants believe that this application is now in condition for allowance and therefore requests favorable consideration.


As discussed in the above referenced interview this Supplemental Amendment is submitted by Facsimile.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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Date


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MARKED-UP COPY OF AMENDED CLAIMS

23. (Amended) A method of recovering metals and minerals from sea water, comprising:

contacting a sponge with sea water, said sponge having a symbiotic relationship with
a [that harbors] bacteria capable of concentrating said metal or mineral [with sea water] , so
as to concentrate the metal or mineral in the bacteria; and

recovering the concentrated metal or mineral from the bacteria.

26. (Amended) The method of Claim 23, wherein said symbiotic bacteria is selected from the group consisting of *Bacillus cereus*, *Citrobacter intermedium*, *Acetobacter methanolicus*, *Thermothrix thiopara*, *Phormidium*, *Oscillatoria*, *Mastigocladus*, *Thiobacillus ferrooxidans*, *Thiobacillus*, *Thiooxidans*, *Bacillus licheniformis*, *Bacillus BKPM 4368*, *Pedomicrobium* and *Bacillus subtilis*.

28. (Amended) A method of recovering gold from sea water, comprising:

contacting a sponge [harboring] having a symbiotic relationship with *Pedomicrobium*
with said sea water; and

recovering concentrated gold from said sponge [harboring *Pedomicrobium*].

29. (Amended) A method of recovering metals and minerals from sea water, comprising:

contacting a sponge [harboring] having a symbiotic relationship with *Cyanobacteria*

with said sea water; and

recovering concentrated metal or mineral from said sponge [harboring *Cyanobacteria*].

31. (Amended) A method of recovering metals and minerals from sea water, comprising:

cultivating sponges having a symbiotic relationship with bacteria in a sponge bed, [wherein said sponges harbor] said bacteria being capable of accumulating said metal or mineral;

permitting said metal or mineral to accumulate; and

recovering concentrated metal or mineral from said sponges.